ABSTRACT

A device and method for emitting output light utilizes Group IIB element Selenide-based phosphor material to convert some of the original light emitted from a light source of the device to a longer wavelength light to change the optical spectrum the output light. Thus, the device and method can be used to produce white color light. The Group IIB element Selenide-based phosphor material is included in a wavelength-shifting region optically coupled to the light source, which may be a blue-green light emitting diode (LED) die.